

Patent claims

1. A method for simulating a movement in a predetermined direction relative to a reference point (P) in the surroundings of an acoustic reproduction device, having the following steps:
- a) the acoustic reproduction device is provided in order to produce at least two virtual sound sources,
 - b) the acoustic reproduction device is controlled using a control unit which is designed for the repeated movement of the at least two virtual sound sources (VS A, VS B, VS C, VS D) in succession from a predetermined starting point (SP) to a predetermined ending point (EP), and from there abruptly back to the starting point (SP), where a direction of movement (B) for the at least two virtual sound sources (VS A, VS B, VS C, VS D) coincides with the direction of the movement which is to be simulated.
2. The method as claimed in claim 1, in which the control in step b) takes place such that a movement by the at least two virtual sound sources (VS A, VS B, VS C, VS D) is effected essentially at right angles to a connecting line (V) between the reference point (P) and a point (MP) in the center between the starting point (SP) and the ending point (EP) of the movement by the at least two virtual sound sources (VS A, VS B, VS C, VS D).
3. The method as claimed in claim 2, in which the control in step b) takes place such that for each virtual sound source (VS A, VS B, VS C, VS D) there is an increase in the sound intensity from the starting point (SP) to the mid-point (MP) and a decrease in the sound intensity from the mid-point (MP) to the ending point (EP).

4. The method as claimed in one of claims 1 to 3, in which a speed of movement for the at least two virtual sound sources (VS A, VS B, VS C, VS D) is constant in step b).

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5. The method as claimed in one of claims 1 to 4, in which at least four virtual sound sources (VS A, VS B, VS C, VS D) are used.

10 6. A sound reproduction arrangement having an acoustic reproduction apparatus for simulating a movement in a predetermined direction relative to a reference point (P) in the surroundings of an acoustic reproduction device and for producing at least two
15 virtual sound sources (VS A, VS B, VS C, VS D) and having a control unit which is designed for the repeated movement of the at least two virtual sound sources (VS A, VS B, VS C, VS D) in succession from a predetermined starting point (SP) to a predetermined
20 ending point (EP), and from there abruptly back to the starting point (SP), where a direction of movement (B) for the at least two virtual sound sources (VS A, VS B, VS C, VS D) coincides with the direction of the movement which is to be simulated.

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7. The sound reproduction arrangement as claimed in claim 6,
in which the control unit has a position detection device for detecting the position of the virtual sound
30 sources (VS A, VS B, VS C, VS D) and is designed to control the intensity of each virtual sound source (VS A, VS B, VS C, VS D) on the basis of its position between the starting point (SP) and the ending point (EP).

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8. The method as claimed in either of claims 6 and 7,
in which the control unit is designed such
that it effects a movement by the at least two virtual
sound sources (VS A, VS B, VS C, VS D) essentially at
5 right angles to a connecting line (V) between the
reference point (B) and a point (MP) in the center
between the starting point (SP) and the ending point
(EP) of the movement by the at least two virtual sound
sources (VS A, VS B, VS C, VS D).

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9. The method as claimed in claim 8,
in which the control unit is designed such
that for each virtual sound source (VS A, VS B, VS C,
VS D) it effects an increase in the sound intensity
15 from the starting point (SP) to the mid-point (MP) and
a decrease in the sound intensity from the mid-point
(MP) to the ending point (EP).